

SPECIFICATION AMENDMENTS

Page 2, fourth full paragraph:

The invention provides the advantage that a processing module easily integrated into any production process, once it is programmed, can prepare almost any arbitrary cardboard blank completely for the end product, without needing to change over the particular processing module for differently coded cardboard blanks.

Page 3, fifth paragraph:

The processing head of the processing device pursuant to the invention is suitably controlled by an EDP (Electronic Data Processing) system. The particular data specific for the blank are stored in memory there and can be integrated into the processing program as needed, if one or more such cardboard blanks are to be manufactured.

Page 4, third full paragraph:

The invention can readily be integrated into ordinary processing lines. Depending on the processing program, it may be suitable to use the process steps of the invention before or after the processing steps that serve to produce the processing lines in the longitudinal or transverse directions, as the case may be. The invention for the first time provides the ability to integrate a device suitable for the procedural steps in the form of a cutting, creasing, perforating, milling, or marking plotter into a so-called in-line machine that operates continuously or in stop-and-go mode, with which all work steps are executed on the a workpiece, starting from a rectangular initial shape to the optionally finished and folded box, along a continuously straight-line machine centerpoint.

Page 5, sixth paragraph:

The device for implementing the method operates by the plotter principle, or that of a robot arm, that is mounted in fixed position outside of the seat area of the cardboard blank, and like the processing head of a plotter, is able to move to move to any point on the cardboard blank.

Page 6, last paragraph, continuing onto page 7:

Fig. 1 is a perspective view of a first embodiment of the invention realized as a gluing plotter,

Fig. 2a is a diagrammatic view of an embodiment of the invention for point application of adhesive,

Fig. 2b is a diagrammatic view of an embodiment for linear adhesive application,

Fig. 2c is a diagrammatic view of an embodiment of the invention for area application of adhesive,

Fig. 3 is a diagrammatic view of an embodiment of the invention corresponding to Fig. 1 followed by a pressing station,

Fig. 4a is a diagrammatic view of an embodiment of the invention with cutting plotter and adhesive plotter as well as pressing station,

Fig. 4b is a diagrammatic view of an embodiment according to Fig. 4a with preceding cutting plotter,

Fig. 5 is an elevational view of a cardboard mount for advertising purposes corresponding to the manufacturing step of Fig. 1,

Fig. 6a is a plan view of an embodiment for a cardboard blank (FEFCO code 0700), and

Fig. 6b is a perspective view of an embodiment of a cutout with hold points.

Fig. 7, first full paragraph:

The figures show the method for producing cardboard blanks. The cardboard blanks 1a, b, c were made from a piece of cardboard originally of rectangular shape. Depending on preceding processing, a layout of the box structure ~~4~~ to be manufactured was prepared from the originally rectangular piece of cardboard by longitudinal cut lines 2 or processing lines of other kinds, and also by transverse cut lines 3 or other kinds of processing lines, as the case may be.

Page 9, fifth paragraph:

In the following machine module, a the processing device 7 in the form of a robot arm pursuant to the invention is shown, which carries a cutter 20 on its end to produce the diagonal cuts in the cardboard blank.

Page 9, next to last paragraph:

The An adhesive device 21 in this case is provided with two processing heads 9, 9' to be able to perform the gluing process faster.

Page 10, third full paragraph:

Figs. 4a, b also show that the other processing lines 5a are cut lines that are produced by a the processing device 7 made as a the cutter 20.

Page 10, sixth full paragraph:

In addition to this, Fig. 6b shows that the other cut lines 5a can be continuous except for predetermined hold points 16, with the hold points 17 fastening the waste chip to the rest of the a blank 18 until the waste chip is to be broken out.

Page 10, seventh full paragraph:

In addition to this, Fig. 1 shows the use of an the EDP system 19 to cause the processing head 9, 9' of the processing device 7 to travel under program control to where the processing is to begin and end.

Page 10, last paragraph:

The EDP system 19 also functions to control and activate the cutter 20, the adhesive device 21, the a knurling device (not shown), and other possible processing functions.

Page 11, first paragraph:

As Figs. 1, 4a, 4b show in particular, the other processing lines 5b can also comprise adhesive points, with the processing device 7 for this purpose being designed as an the adhesive device 21.

Page 11, fourth paragraph:

Following the pressurizing device is the an adhesive applicator 22, from which the adhesive is then discharged toward the cardboard blank 1a, b, c.

Page 11, seventh paragraph:

The adhesive applicator is likewise enclosed by the a heater 28 and has a discharge valve 29 at its discharge end that has a stepper 30 controllable by an electric motor. This is likewise controlled by the EDP system 19.

Page 11, sixth paragraph:

In this embodiment, the adhesive is applied only at points 23 on the back of the cardboard blank.

Page 13, first paragraph:

The invention can accordingly be implemented, on the one hand, by means of two fixed-location guidance systems ~~24~~, 24a, 24b; 25a, 25b movable perpendicular to one another, and also, as shown in particular by Figs. 4a, 4b, by a processing head 9 that rests on a boom 26 that can be rotated and extended, in the manner of a robot arm.

Page 13, seventh paragraph:

A The discharge valve 29 - preferably controlled by the EDP system 19 - can be provided to control the glue nozzle 27.

Page 14:

If a the pressing station 31 is placed beyond ~~the~~ a fixed-location processing station 40, which in the cases of Figs. 4a, b is an adhesive device 21, all of the glue spots in question can be fixed in the direction of transport 6 during the further processing of the cardboard blank, until the glue has set. The pressing station here is a compression belt; alternatively, it can be a platen press station.